



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

JL

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,221	07/08/2003	Robert E. Meiners	0315-0001	7290
37999	7590	06/23/2006	EXAMINER	
24IP LAW GROUP USA, PLLC 12 E. LAKE DRIVE ANNAPOLIS, MD 21403			PHAN, THAI Q	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/614,221	MEINERS ET AL.
	Examiner Thai Phan	Art Unit 2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07/08/2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-11 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>Oct. 2003</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

This Office Action is in response to patent application S/N: 10/614,221, filed on 07/08/2003. Claims 1-11 are pending in the Action.

### ***Information Disclosure Statement***

The information disclosure statement filed on Oct. 09, 2003 was considered.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Stump, Grep, US patent application publication no. 2004/0168358.

As per claim 1, Stump anticipates a method and system for locating and detecting underground utility within a sub surface of the earth with feature limitations very identical to the claimed invention. According to Stump, the system includes

A computer (Fig. 4, (252))

An input device for accepting GPS data into the system (Fig. 4, [0091]-[0094]),

Means within the computer for constructing a geoposition of an excavation or drainage system for the design ([0036]-[0039], [0051], for example),

Means for generating cost estimation for the excavation or drainage system ([0039]-[0050]),

And means for processing the machine excavator to perform the project ([0056]-[0061]).

As per claim 2, Stump anticipates a mobile vehicle for collecting survey data in GPS format ([0054], [0062], [0068]).

As per claims 3-6, Stump anticipates the claimed limitations for construction land survey, excavation site mapping, etc.

As per claim 7, Stump anticipates a method and system for locating and detecting underground utility within a sub surface of the earth with feature limitations very identical to the claimed invention. According to Stump, the method includes steps:

A computer for processing the collected data (Fig. 4, (252))

An input device for accepting GPS data into the system (Fig. 4, [0091]-[0094]),

Means within the computer for constructing a geoposition of an excavation or drainage system for the design ([0036]-[0039], [0051], for example),

Means for generating cost estimation for the excavation or drainage system ([0039]-[0050]),

And means for processing the machine excavator to perform the project ([0056]-[0061]).

As per claim 8, Stump anticipates a map with contour lines for excavation planning, etc.

As per claims 9 and 10, Stump anticipates a method and system/machine for locating and detecting underground utility within a sub surface of the earth with feature limitations very identical to the claimed invention. According to Stump, the system includes

A computer (Fig. 4, (252))

An input device for accepting GPS data in real time kinematics with differentiated data such as survey data, mapping data, process instructions, etc. into the system (Fig. 4, [0091]-[0094]),

Means within the computer for constructing a geoposition of an excavation or drainage system for the design ([0036]-[0039], [0051], for example),

Means for generating cost estimation for the excavation or drainage system ([0039]-[0050], [0091]-[0095]),

And means for processing the machine excavator to perform the project ([0056]-[0061]).

As per claim 11, Stump anticipates a method and system for locating and detecting underground utility within a sub surface of the earth with feature limitations very identical to the claimed invention. According to Stump, the differential GPS system includes

A computer (Fig. 4, (252)),

Means for gridding a survey area and processing grid map for site planning,

An input device for accepting GPS data into the system (Fig. 4),

Means within the computer for constructing a geoposition of an excavation or drainage system, or topological mapping for the design ([0036]-[0039], [0051], for example),

Means for generating cost estimation for the excavation or drainage system ([0039]-[0050]),

And means for processing the machine excavator to perform the project ([0056]-[0061]).

### ***Conclusion***

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US patent no. 5,995,895, issued to Watt et al, on Nov. 1999

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Phan whose telephone number is 571-272-3783. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on 571-272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 16, 2006

Thai Phan  
Thai Phan  
Primary Examiner